

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) A plant for handling and stacking thermoformed containers or lids having at least three projections (8a, 8b) acting as stacking spacers, at least one of which is arranged at non specular symmetry with respect to at least a centre line (m-m) of the respective container or lid (2), said plant (4) including, in sequence, a receiving station (3) for a container or lid or a moulding of containers or lids (2), at least a stacking or working station (6) for said containers or lid (2), a stacking station (4) for said containers or lids (2), means (5, 50) of transferring the containers or lids (2) from the receiving station (3) to the stacking station (4) through each working or handling station (6), and is characterized in that at least one of the said handling stations (6) includes handling means (17) arranged to rotate through a predetermined angle every other moulding of containers or lids (2) before or during their transfer to said stacking station (4), thereby obtaining stacks (7) of lids or containers (2), where the stacking spacers (8a, 8b) of a container or lid (2) are angularly offset with respect to those of the next container or lid.
5. (Currently Amended) A plant according to claim 4, wherein said handling means are comprises a support structure (15,16) and a head or unit (17) for picking up samples of a moulding of thermoformed products (2), which is rotatably supported rotatably and can be lift and

lowered on said support structure (15, 16).

6. (Currently Amended) A plant according to claim 5, wherein said picking up unit (17) comprises a support member (19) rotatably mounted around a vertical axis on said support structure (15, 16), a multiplicity of spacers (20) carried by said support member (19) and extending downwards, and a holding means (21) carried by each said spacer (20) and spaced apart with respect to the remaining holding means (21) according to the configuration of a moulding of thermoformed products (2) transported by said transfer means (5, 50).
7. (Currently Amended) A plant according to claim 6, wherein said holding means (21) includes suckers.
8. (Currently Amended) A plant according to claim 6, including a geared motor unit (18) for controlled rotation of said support member (19).
9. (Currently Amended) A plant according to claim 6, wherein said support structure includes a fixed support (16), an overhanging arm (15) having one end thereof slidably mounted along at least a vertical guide (16a) on said fixed support (16), and drive means (16b, 16c) to cause said overhanging arm controllably to lift and lower.
10. (Currently Amended) A plant according to claim 6, wherein said handling means includes a robot (60) having at least an overhanging arm (15) mounted for rotation either around a horizontal axis to carry out raising -lowering movements for said support member (19) or around a vertical axis to transfer mouldings of thermoformed products (2) away from said transfer means (5, 50).
11. (Currently Amended) A plant according to claim 10, wherein said robot comprises drive means (62) and guide means (65) to carry out movements from and to said handling station (6).

12. (Currently Amended) A plant according to claim 4, wherein said handling means include at least a support template ~~(9a-12a)~~ for a moulding of thermoformed objects ~~(2)~~, a support frame ~~(39-42)~~ carried by said transfer means ~~(5,50)~~ for each support template ~~(9a-12a)~~ and having a circular opening at which a respective template ~~(9a-12a)~~ is rotatably mounted, and drive means for causing said template ~~(9a-12a)~~ controllably to rotate upon control.
13. (Currently Amended) A plant according to claim 4, wherein said transfer means comprises at least one rotating conveyor ~~(5)~~ with a plurality of arms ~~(9-12)~~.
14. (Currently Amended) A plant according to claim 4, wherein said transfer means comprises at least one linear conveyer ~~(50)~~.
15. (Currently Amended) A plant according to claim 13, comprising a single station thermoforming press ~~(31)~~ with cut and form mould ~~(32)~~ having a suction plate ~~(30)~~ for picking up thermoformed objects ~~(2)~~ thermoformed therein and arranged to discharge mouldings of thermoformed products ~~(2)~~ at said receiving station ~~(3)~~.